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From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
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Subject: Ham-Homebrew Digest V93 #19
To: Ham-Homebrew

Ham-Homebrew Digest Mon, 23 Aug 93 Volume 93 : Issue 19

Today's Topics:

 DC-grounds in modular construction
 Julieboard part sources

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Aug 1993 13:52:39 +0300
From: pipex!sunic!news.funet.fi!butler.cc.tut.fi!lehtori.cc.tut.fi!not-for-
mail@uunet.uu.net
Subject: DC-grounds in modular construction
To: ham-homebrew@ucsd.edu

Which is the preferred way to connect DC ground (and control signal
grounds) to a modular construction (each function in a separate
shielded box and RF-connections thru BNC/SMA connectors) ? Is it
through the box or with separate grounding wires from each module
to the power supply ?

The former works well if the shielded boxes are mounted on a metallic
mounting frames *and* the module is always in the box. This is not
usually the case during construction and testing and the grounding
would go through the coax shield (only if the coax is connected to
a near by DC-grounded module).

In the latter case by connecting DC-power and DC-ground from each
module to the power supply (by twisted pair cable to minimize
RF-pickup), DC-ground is guaranteed to be connected whenever DC-power

is connected. The problem is that there are lots of ground loops. Would a small inductance in the DC-ground leads break these ground loops and if so, how large should the reactance be at the operating frequency ? How about 1/4 wave (or 3/4, 5/4 etc.) long DC-power and DC-ground lines ?

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Date: Sun, 22 Aug 1993 16:11:30 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!nshore!seastar!
jjw@network.ucsd.edu
Subject: Julieboard part sources
To: ham-homebrew@ucsd.edu

As quoted from <1993Aug21.195603.9223@vicstoy.UUCP> by kc4zvw@vicstoy.UUCP (David Billsbrough):

>
> In an article of 73 mag (August), there is a project for a DDS synthesizer.
> The parts list includes a Harris HSP45102 and a CA3338AE. A previous
> message mentioned Wyle Labs as a source for these items. Can anyone
> post an address or telephone number for this or another supplier. Also
> specify the minimum order limits of supplier if known.
>
> // David //

Dunno where Wyle Labs is, but the CA3338E *is* available from DigiKey, for around \$14-ish. Another part you'll need is the Coilcraft filter, which Digikey doesn't carry either. Additionally, have you looked at the circuit board artwork? Many of the traces are shorted together. You'll have to buy a board from the author anyway, so it may be easier to just get the whole kit (but there were no prices listed).

I'm trying to get a sample chip from my local Harris rep to play with. It looks to be comparable to the Q2220 I used, but with finer steps and not-so-easy to parallel-load it. It would make a nice

DDS-controlled PLL for VHF work, though...

-->jjw n9jzw

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End of Ham-Homebrew Digest V93 #19
